

# Resilience for Immunization Programs

Case Study:  
PHILIPPINES





**HOW IS THE PEDIATRIC IMMUNIZATION PROGRAM SET UP?**



# Philippine Health Information Profile

- 7, 107 Islands in Southeast Asia
- Population  $\approx$  107 M

– National Immunization Program target birth cohort: 2.7 M

- Low Middle Income Country

- Total health expenditure (2014)
  - 4.7% of gross domestic product
  - 10% of total government expenditure

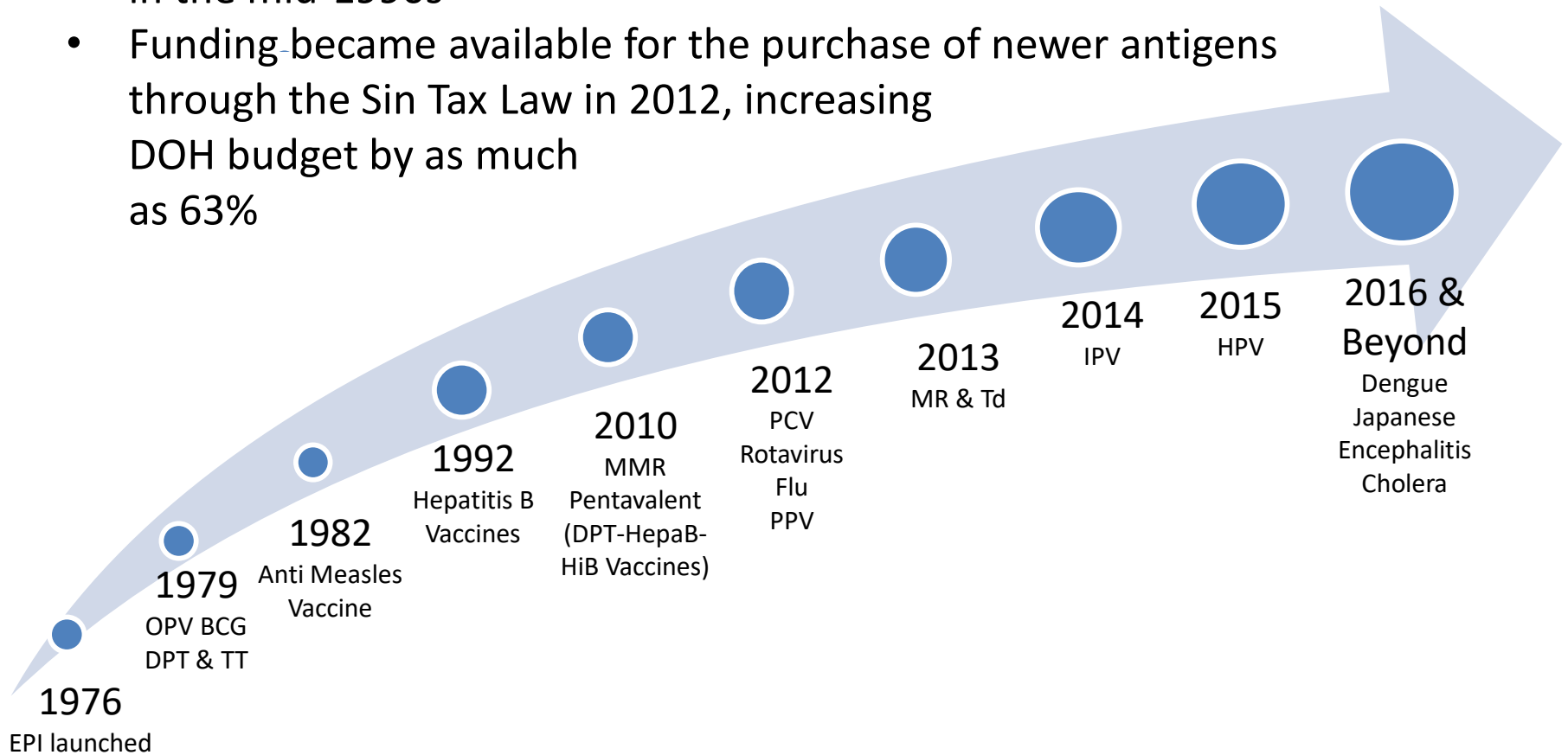
U5 Mortality Rate : 22.6/1000  
live births (2017)

# The Expanded Program on Immunization

- Established in 1976, with vaccines provided free by UNICEF
  - Initially included included six vaccine-preventable diseases: tuberculosis, poliomyelitis, diphtheria, tetanus, pertussis and measles
- Immunization services are available in public health centers nationwide; health staff follow up infants in catchment areas to ensure all required vaccinations are received by the first birthday

# The Expanded Program on Immunization

- The Philippines DOH began to purchase its own supply of vaccines in the mid-1990s
- Funding became available for the purchase of newer antigens through the Sin Tax Law in 2012, increasing DOH budget by as much as 63%



References: 1. Dayrit MM et al. The Philippines Health System Review. Health Systems in Transition 2018 Vol. 8 No. 2

2. <http://www.doh.gov.ph/expanded-program-on-immunization>

3. Immunization in the Philippines Current Trends and the way forward accessible at: <http://www.globe-network.org/sites/default/files/en/network/resource/12.joyce-ducusin.pdf>

# Current PH EPI Immunization Schedule

## Schedule ng Pagbibigay ng Bakuna para sa mga Batang Isang Taon Pababa



**'Pag Kumpleto, Protektado'**

BAKUNA	SAKIT NA MAIIWASAN	NIREREKOMENDANG EDAD NG BATA					
		PAGKA-PANGANAK	1½ BUWAN	2½ BUWAN	3½ BUWAN	9 BUWAN	1 TAON
BCG	Tuberkulosis	✓					
HEPATITIS B	Hepatitis B	✓					
PENTAVALENT VACCINE (DPT-Hep B-HiB)	Dipterya, Tetano, Hepa B, Pertussis, Pulmonya, Meningitis		✓	✓	✓		
ORAL POLIO VACCINE (OPV)	Polio		✓	✓	✓		
INACTIVATED POLIO VACCINE (IPV)	Polio				✓		
PNEUMOCOCCAL CONJUGATE VACCINE (PCV)	Pulmonya, Meningitis		✓	✓	✓		
MEASLES, MUMPS, RUBELLA (MMR)	Tigdas, Beke, German Measles					✓	✓

### MGA PAALALA

Nagsisimula ang pagbabakuna ng bata sa kapanganakan.

Sundin ang schedule ng bakuna at siguruhing makumpleto ang mga ito hanggang sumapit ang kanyang unang kaarawan.

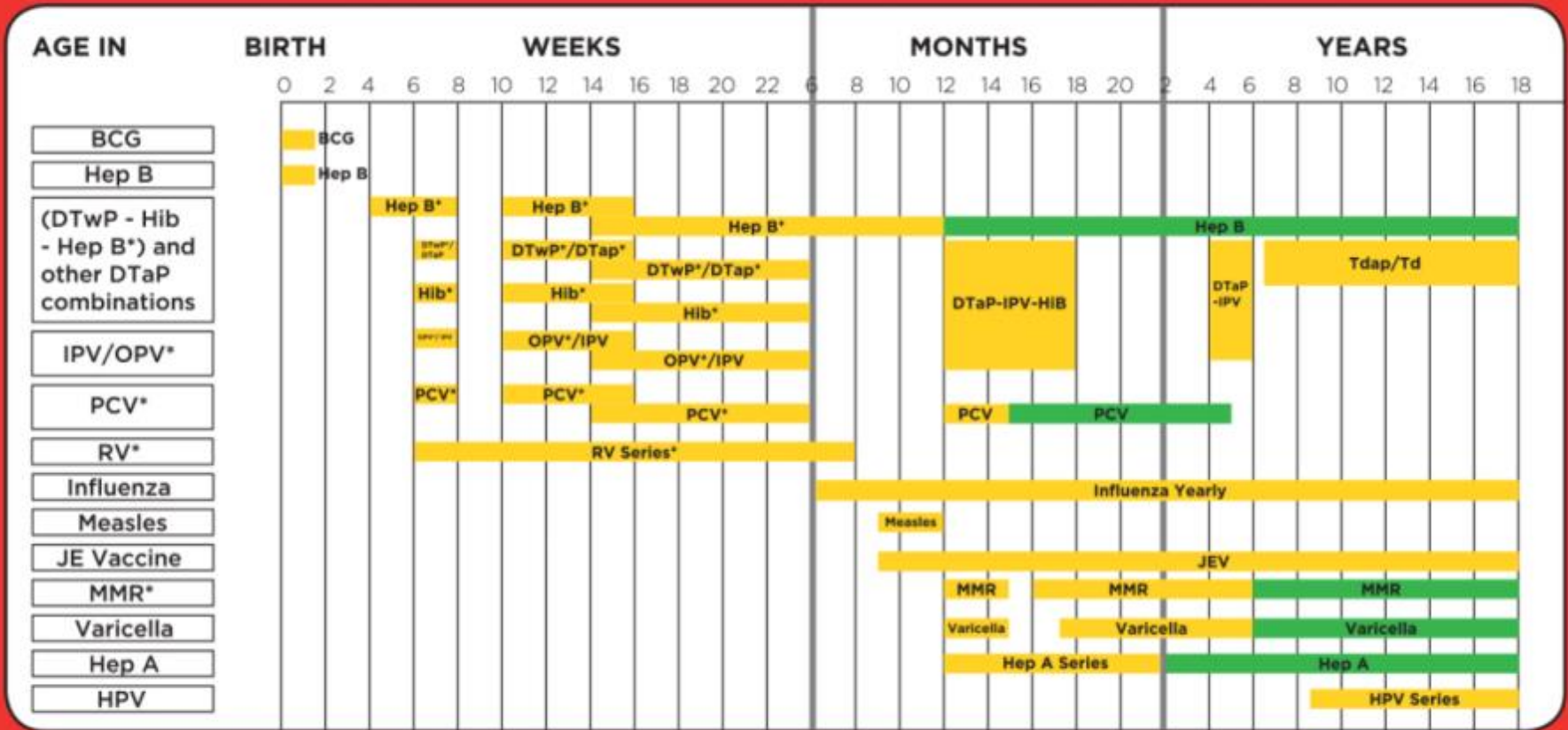
Ang mga bakunang hindi nakalista ay maaring makuha sa pribadong ospital o doktor.



**Kalusugang Tuloy-Tuloy para sa Pamilyang Pinoy**

# Covers approximately 10% of the birth cohort...

## Childhood Immunization Schedule 2019



Range of Recommended Age
Catch Up Immunization
\*Primary doses are given at least 4 weeks apart

**DISCLAIMER:**  
 The Childhood Immunization Schedule presents recommendations for immunization for children and adolescents based on updated literature review, experience and premises current at the time of publication. The PPS, PIDSP and PFV acknowledge that individual circumstances may warrant a decision differing from the recommendations given here. Physicians must regularly update their knowledge about specific vaccines and their use because information about safety and efficacy of vaccines and recommendations relative to their administration continue to develop after a vaccine is licensed.

**Vaccines in the Philippine National Immunization Program (NIP)**  
 The following vaccines are in the 2018 NIP:  
 • BCG, monovalent Hep B, Pentavalent vaccine (DTwP-Hib-HepB), bivalent OPV, IPV, PCV\*, MMR, MR, Td, HPV\*, JE\*

**Recommended Vaccines**  
 These are vaccines not included in the NIP which are recommended by the Philippines Pediatric Society (PPS), Pediatric Infectious Disease Society of the Philippines (PIDSP) and the Philippine Foundation for Vaccination (PFV).

**HOW DID THE ISSUE UNFOLD?  
WHAT WAS THE RESPONSE AND  
ACTION TAKEN BY AUTHORITIES,  
MEDIA, HEALTHCARE WORKERS,  
PUBLIC?**







2017

Nov:  
Sanofi  
Pasteur  
warns of  
'severe  
disease'  
from  
dengue  
vaccine  
for  
people  
with no  
prior  
infection



Dec  
2017

- Dec: temporary suspension of the dengue vaccination program
- 04 Dec: Justice Department orders the National Bureau of Investigation to look into the dengue vaccination program
- 05 Dec: PhilFDA suspends the sale and distribution of Dengvaxia.
- 07 Dec: Health Department returns unused doses, asks for refund of PhP 3.5B
- 11Dec: House and Senate will again investigate dengue vaccination program.
- 14 Dec: Former Pres Aquino, under whose administration the deal was approved, attends the Senate hearing on the vaccine program.



# 2018

- 10 Jan: The Public Attorney's Office (PAO) conducts an autopsy on five vaccinated children who died
- 11 Jan: :Some parents in Zamboanga refuse the DOH's deworming program due to the Dengvaxia scare.
- 02 Feb: UP-PGH experts' panel report is released: no direct link between the deaths and the vaccine
- 05 Feb: Sanofi Pasteur turns down the Health Department's demand to refund used dengue vaccine vials, and also rejects the Department of Health's request to financially support hospitalized vaccinated children.
- PAO files a civil case against Garin, former Undersecretary Kenneth Uy, and other health officials of implementing the program in undue haste even if "the product has no proven safety and efficacy."

# Batang hinihinalang namatay sa Dengvaxia, 'pinag-eksperimentohan'?

ABS-CBN News

Posted at Jan 24 2018 11:20 PM | Updated as of Jul 18 2019 04:07 PM





Friends of Public Attorney's Office - PAO

- Home
- Events
- Reviews
- About
- Videos
- Photos
- Posts
- Community



Like Follow Share ...

Send Message

Friends of Public Attorney's Office - PAO was live. January 3

4.7 out of 5 - Based on the opinion of 220 people

108th Dengvaxia dead victim, 3 doses (4/9/16; 11/23/16; 6/27/17 ). Died



Friends of Public Attorney's Office - PAO

- Home
- Events
- Reviews
- About
- Videos
- Photos
- Posts
- Community

Like Follow Share ...

Friends of Public Attorney's Office - PAO was live. January 3

Send Message

4.7 out of 5 - Based on the opinion of 220 people

108th Dengvaxia dead victim, 3 doses (4/9/16; 11/23/16; 6/27/17 ). Died this morning (January 3, 2019), before forensic examination upon the request of her mother and father ; not yet infected with dengue before mass indiscriminate vaccination starting Garin's time. part 1.

WARNING: This video contains graphic medical content that some viewers may find disturbing. Viewer Discretion is Strongly Advised.



Community See All

- Invite your friends to like this Page
- 77,951 people like this
- 91,924 people follow this
- Edward Tee and 1 other like this

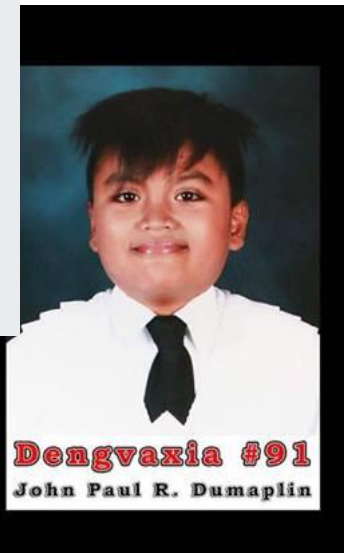
About See All

- Away Send Message
- Community
- Suggest Edits

Page Transparency See More

Facebook is showing information to help you better understand the purpose of a Page. See actions taken by the people who manage and post content.

Page created - April 26, 2018



# PAO Chief Acosta: 'Kapag nag-outbreak, kasalanan ko? Bakit ako ba 'yung lamok?' | 24 Oras



ISYU SA PAO

24

PAO CHIEF ACOSTA: "KAPAG NAG-OUTBREAK, KASALANAN KO? BAKIT AKO BA 'YUNG LAMOK?'"

ANG BUNTIS, WALANG TAKAS SA OPERASYON KONTRA DROGA SA CAVITE ASONG UMATAKE SA

GMA  
NEWS  
GMA11TV

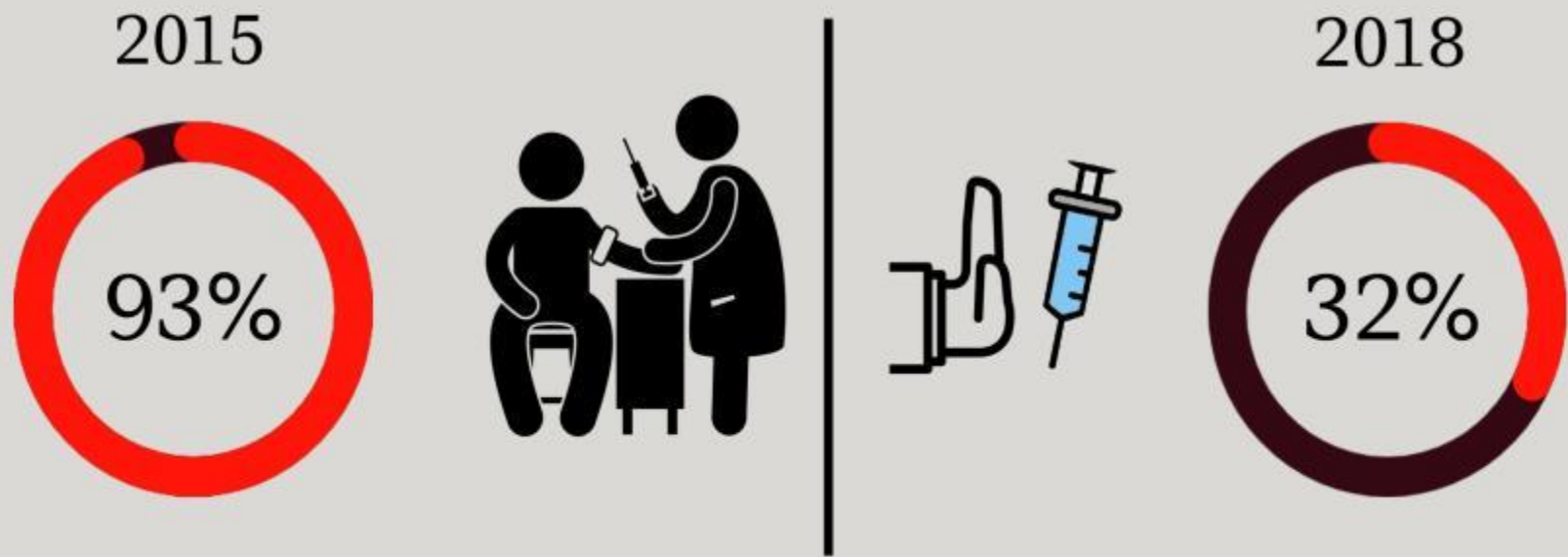
# So what went wrong?

- POLITICS
- PUBLIC MISINFORMATION
- PANIC
- Coming together in a perfect storm...

**HOW DID IT AFFECT VACCINE  
COVERAGE AND ANY OTHER IMPACT?**



# Dramatic drop in vaccine confidence in the Philippines

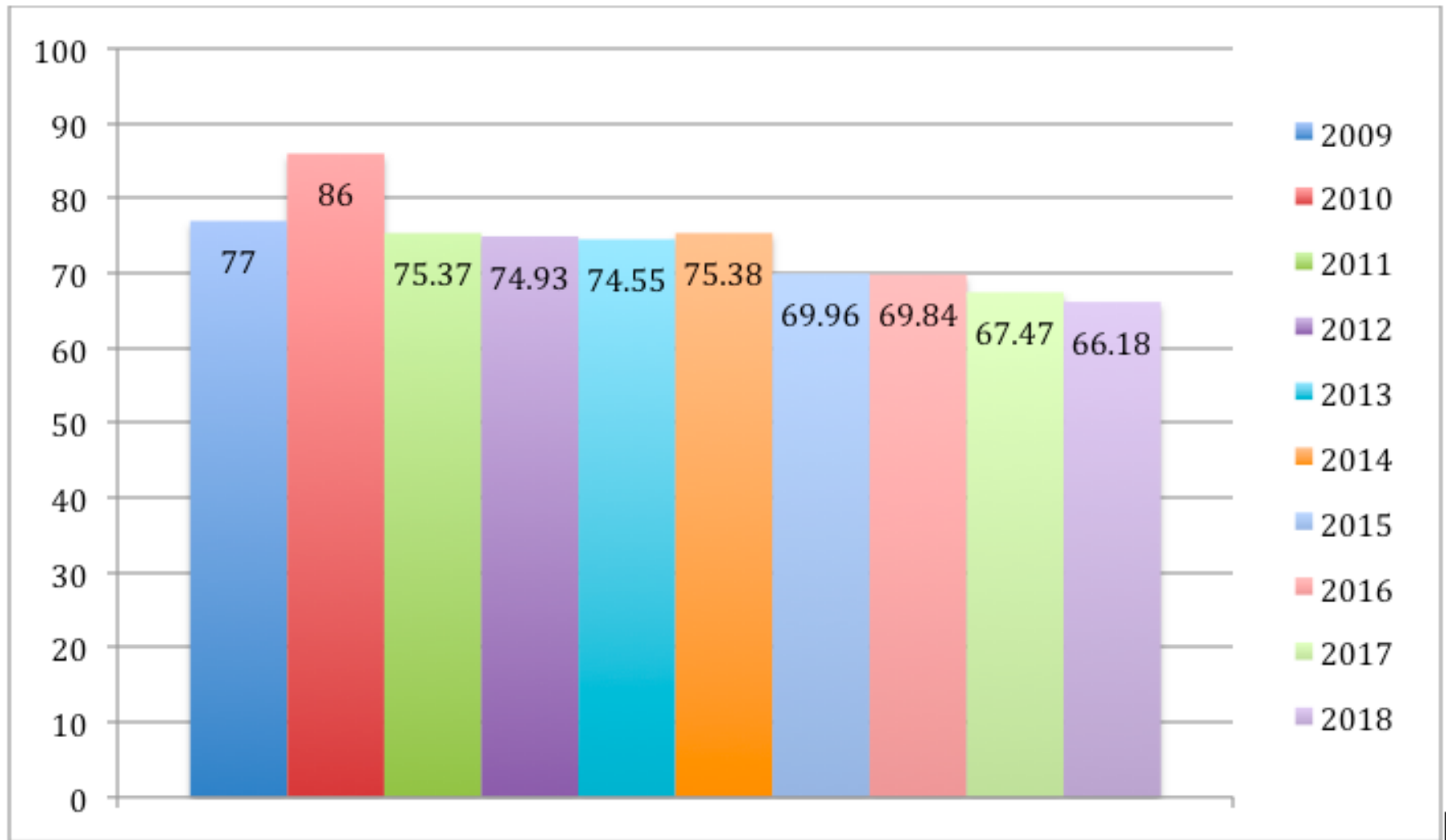


1,500 participants were re-surveyed in 2018 to analyze the Philippines' confidence data against 2015 data for the country <sup>2</sup>

Vaccine **safety**: four-fold drop in confidence from 82% strongly agreeing that vaccines are safe in 2015 to only 21% in 2018 <sup>2</sup>

Confidence in the **effectiveness** of vaccines dropped from 82% in 2015 to 22% in 2018 <sup>2</sup>

# FIC rates have been declining ...



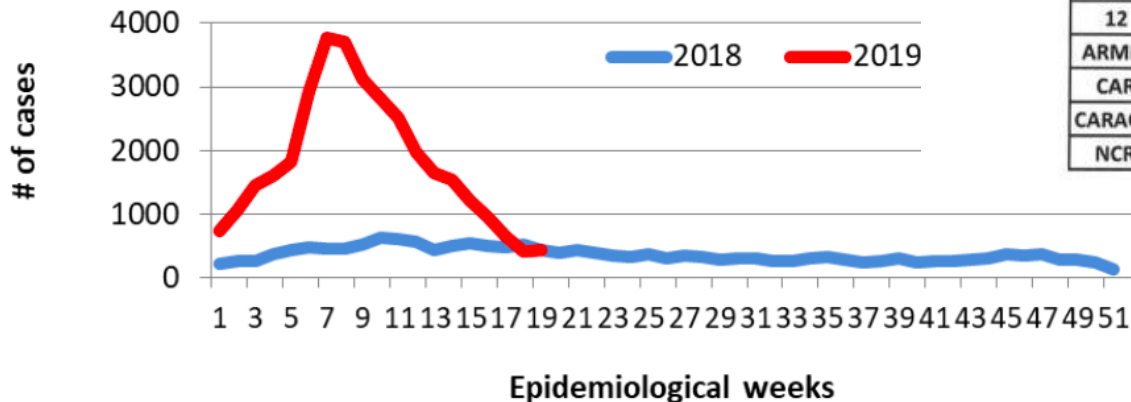
# Measles outbreak declared 07 Feb 2019

- Current measles outbreak started late 2017 in Mindanao.
- In 2018, 20,827 cases were reported with 199 deaths.
- DoH declared measles outbreaks in 5 Regions (Region NCR, III, IVA, VI, VII) on 7 February 2019
- 1 January and 11 May 2019: 34,950 measles cases, 477 deaths, CFR 1.37%

**Table 1: Cumulative Measles Cases by Region  
11 May 2018 vs 11 May 2019**

Region	2018			2019		
	Cases	Deaths	%CFR	Cases	Deaths	%CFR
<b>PHL</b>	<b>8,580</b>	<b>75</b>	<b>0.9</b>	<b>34,950</b>	<b>477</b>	<b>1.4</b>
01	125	0	0	1,548	19	1.2
02	29	0	0	531	2	1.0
03	278	4	1.4	5,803	107	1.8
04A	256	2	0.8	6,481	117	1.8
04B	23	0	0	1,488	16	1.1
05	33	0	0	1,048	8	0.8
06	112	0	0	2,102	7	0.3
07	167	1	0.6	1,719	11	0.6
08	19	0	0	1,460	31	2.1
09	1,018	5	0.5	469	1	0.2
10	817	2	0.2	1,808	10	0.6
11	1,065	13	1.2	882	12	1.4
12	857	9	1.1	678	5	0.7
ARMM	2,815	23	0.8	617	6	1.0
CAR	25	0	0	579	2	0.3
CARAGA	93	1	1.1	986	9	0.9
NCR	848	15	1.8	6,751	114	1.7

**Figure 1. Measles Cases by Week of Rash Onset  
1 January 2018-11 May 2019**



# Dengue outbreak declared 07 August 2019



DENGUE

146,062 CASES  
622 DEATHS  
(from January 1 - July 31, 2019)

CALABARZON  
16,515 cases

REGION 6  
23,330 cases

REGION 10  
10,100 cases

REGION 9  
12,317 cases

REGION 12  
11,083 cases



Data Source: DOH Surveillance Reports



Republic of the Philippines  
Department of Health  
Kagawaran ng Kalusugan



Dengue Surveillance Report

Epidemiology Bureau  
Public Health Surveillance Division

Date of Report: September 13, 2019  
Inclusive Date: January 1 – August 31, 2019 (MW 35)

## A. Reported Dengue Cases for MW35 (August 25 to August 31, 2019)

- As of September 13, there were **12,526 reported dengue cases** for August 25 to 31, 2019 (MW35). This is **52% higher** compared to the same time period in 2018 (n=8,254). There were 41 deaths reported for this MW alone, giving a **CFR of 0.33%** (Table 1).

Table 1. Cumulative Reported Dengue Cases by Region  
January 1- August 31, 2019 vs January 1- August 31, 2018

Region	2019				2018					
	Cases reported for Morbidity Week (MW) 35	Number of Deaths reported for MW 35 (CFR)	Cumulative Number of Cases reported	Cumulative Number of deaths reported	Cases reported for Morbidity Week (MW) 35	Number of Deaths reported for MW 35 (CFR)	Cumulative Number of Cases reported	Cumulative Number of deaths reported		
	August 25 to 31, 2019	August 25 to 31, 2019	January 1 to August 31, 2019	January 1 to August 31, 2019	August 25 to 31, 2018	August 25 to 31, 2018	January 1 to August 31, 2018	January 1 to August 31, 2018		
PHILIPPINES	12,526	41	0.33	271,480	1,107	8,254	33	0.40	127,478	655

Since 01 Jan 2019:

292 076 total cumulative cases, CFR 0.25

# Polio outbreak declared 19 Sep 2019

The New York Times

Phil

Situat  
Polio

19 Sep

**VDPV1** f  
lance co  
pumpin  
NIID. Th  
not find

**VDPV2** 1  
one envi  
gust 20  
onset of  
Compar  
known t

A polio  
strated  
tections

## *Philippines Declares Polio Outbreak After 19 Years Free of the Disease*



Polio and measles vaccinations in Manila in 2014. The Philippine government on Thursday announced one new case of polio.

Gregorio B. Dantes Jr./Pacific Press, via Getty Images

World Health  
Organization  
Representative Office  
in the Philippines

V1	cVDPV2
	2
	1

ronmental surveil-  
om a sewage  
r VDPV1 by the  
the viruses and did

positive for VDPV2:  
Ivao City on 22 Au-  
and 6 July 2019. The  
n all VDPV2 isolates.  
age with any other

ed on the demon-  
nvironmental de-

**WHAT WERE THE KEY FACTORS /  
LEARNINGS AND WHAT HAS BEEN  
DONE DIFFERENTLY SINCE?**

# Restoring trust in vaccination through public private partnership



## An Urgent Plea from the PHILIPPINE PEDIATRIC SOCIETY and the PEDIATRIC INFECTIOUS DISEASE SOCIETY OF THE PHILIPPINES Immunize Eligible Children Against Vaccine-Preventable Diseases

06 February 2019

Dear Colleagues:

The ongoing increase in measles cases in the Philippines is alarming. A recent Department of Health Philippine Integrated Disease Surveillance and Response (PIDSR) report showed that out of almost 22,000 cases of clinical measles-rubella reported between Jan-Dec 2018, there were 5,120 confirmed measles cases. Among these cases, about 200 deaths were reported, among which 59 were confirmed measles deaths. This reflects a staggering 547% increase in cases compared to the previous year (791 cases and 17 deaths in 2017). Of note, 70% of cases and 88% of deaths due to measles had not been vaccinated. All regions in the country have been affected by this crisis.

Measles is a highly communicable disease, having an attack rate of 90% among susceptible exposed individuals. More than 95% of a given population needs to be protected to interrupt ongoing transmission. The World Health Organization aims to "achieve at least 95% coverage with both the first and second routine doses of measles vaccine (or measles-rubella-containing vaccine as appropriate) in each district and nationally" as part of the Global Measles and Rubella Strategic Plan 2012-2020. Unfortunately, the National Demographic and Health Survey revealed a decreasing trend in the number of vaccinated children, from 80% in 2008 to 70% in 2017. Recent news articles have quoted DOH officials confirming a further decline in vaccination coverage to about 60% last year.

We, as healthcare providers, have the responsibility of educating our patients about the importance of disease prevention through immunization. We should take every opportunity to convince and reinforce the message that the vaccines available to prevent diseases are safe and highly effective, and that vaccination remains the main intervention in reducing morbidity and mortality against infectious diseases.

In addition to the above, some activities that we can embark on include:

### 1. As individual clinicians:

- a. Ensure up-to-date immunization of all our patients.
- b. Provide the first dose of measles-containing vaccine (monovalent measles, MR, MMR) to infants starting at age 6 months instead of the usual 9 months of age, as recommended in the Childhood Immunization Schedule.

page 1 of 2



# Reconstitution of the NIC



Republic of the Philippines  
Department of Health  
**OFFICE OF THE SECRETARY**

September 11, 2018

## **DEPARTMENT PERSONNEL ORDER**

No. 2018 - 4752

**SUBJECT : Reconstitution of the National Immunization Committee (NIC)**

The National Immunization Committee (NIC) was created since 1986 under the Ministry Order No. 327-A s.1986 to serve as the advisory committee to the national Expanded Program on Immunization. The NIC was reconstituted to strengthen the implementation of the immunization program and to provide direction and technical support on policies and plans pertaining to the immunization program.

This order supersedes DPO N. 2016-0968 dated March 15, 2016 and its amendments.





Home Category / National / Bill limits DOH secretary's choices of vaccines

## Bill limits DOH secretary's choices of vaccines

1231  
SHARES

Share it!



Published December 30, 2018, 4:55 PM

By Charissa Luci-Atienza

Camarines Sur Rep. Luis Raymund Villafuerte wants to repeal the discretion given to the Department of Health (DOH) secretary to augment the list of vaccine-preventable diseases in the mandatory basic immunization program.

EIGHTEENTH CONGRESS OF THE  
REPUBLIC OF THE PHILIPPINES  
First Regular Session

SENATE

S. B. No. 398

'19 JUL 11 P4:09

INTRODUCED BY SENATOR CHRISTOPHER LAWRENCE "BONG" T. GO

AN ACT  
EXPANDING THE COVERAGE OF THE MANDATORY BASIC IMMUNIZATION PROGRAM AND PROVIDING A SYSTEM IN THE DETERMINATION OF OTHER TYPES OF VACCINE-PREVENTABLE DISEASES, AMENDING FOR THE PURPOSE REPUBLIC ACT NO. 10152, OTHERWISE KNOWN AS THE "MANDATORY INFANTS AND CHILDREN HEALTH IMMUNIZATION ACT OF 2011"

EIGHTEENTH CONGRESS OF THE  
REPUBLIC OF THE PHILIPPINES  
First Regular Session

SENATE

S. No. 662

'19 JUL 22 P2:09

Introduced by SENATOR RAMON BONG REVILLA, JR.

AN ACT  
EXPANDING THE COVERAGE OF THE MANDATORY BASIC IMMUNIZATION PROGRAM AND PROVIDING A SYSTEM IN THE DETERMINATION OF OTHER TYPES OF VACCINE-PREVENTABLE DISEASES, AMENDING FOR THE PURPOSE REPUBLIC ACT NO. 10152, OTHERWISE KNOWN AS THE "MANDATORY INFANTS AND CHILDREN HEALTH IMMUNIZATION ACT OF 2011"

## RECOMMENDATION:

- **CREATION OF A TRANSPARENT DECISION AND PROCUREMENT SYSTEM**
- **NITAG URGENTLY NEEDED!!!**

In 1976, the Philippines established its Expanded Program on Immunization (EPI) to reduce morbidity and mortality among children brought about by the most common vaccine-preventable diseases, by ensuring that infants/children and mothers have access to routinely recommended infant/childhood vaccines.<sup>1</sup>

In 2011, the Republic Act No. 10152, known as the Mandatory Infants and Immunization Act of 2011<sup>2</sup> was enacted in accordance with Article II, Section 15 of the Constitution, to enable the government to take a proactive role in the preventive health of infants and children. RA 10152 allowed the State to adopt a comprehensive, mandatory, sustainable immunization program for vaccine-preventable diseases for all infants and children for vaccine-preventable diseases such as TB, diphtheria, tetanus, pertussis, polio, measles, mumps, rubella, hepatitis B, *H. influenzae* type B, and “such other types as may be determined by the Secretary of Health in a department circular.”

The Department of Health (DOH)'s strategies to implement the EPI are the following:

- 1) Routine immunization for infants/children/women through the Reaching Every Barangay (REB) Strategy, an adaptation of the WHO-UNICEF Reaching Every District (RED), with 5 components: data analysis for action, re-establish outreach services, strengthen links between community and service, supportive supervision, and maximizing resources.
  - 2) Supplemental Immunization Activity (SIA), which are used to reach children who have not been vaccinated or have not developed sufficient immunity after previous vaccinations (conducted either nationally or subnationally- in selected areas).
-

# Conclusions

- Threats to vaccination confidence can exist even in settings with high disease prevalence
- Issues must be well defined for relevant solutions to be proposed
- Opportunities to reinforce vaccine confidence are present, even in seemingly disastrous situations





Salammat  
rod.